

## Claims:

1. Method for the manufacture of a ball valve (1) between two tubes (3,4), in which method the ends (7, 8) of said tubes are sealed against a rotatable valve ball (2) opening and closing the valve, and the valve ball and the tube ends are surrounded by a sleeve-like cover (10) to be jointed to the mantle surfaces of the tubes, characterized in that the mantle of the tube (3, 4) has a front face (29) formed by a beveling or stepping, narrowing it towards the end (7, 8) of the tube, that the sleeve-like cover (10) has an end face (22, 23) directed similarly to the front face of the tube, that the front face of the tube and the end face of the cover are brought against each other, and that the tube and cover are jointed to each other by beam welding by directing the welding beam (31) between said faces brought against each other, following their direction.

2. Method according to Claim 1, characterized in that the mantle of said tube (3, 4) has turns (27, 28) on both sides of the front face (29) so that the welding beam penetrating the joint (11, 12) formed by the opposite surfaces hits the turn and the material of the tube mantle below.

3. Method according to Claim 1 or 2, characterized in that the beveled front face (29) of the mantle of the tube (3, 4) is in an angle of approximately 30-60°, preferably approximately 45° in relation to the axial direction of the tube.

4. Method according to one of the preceding, characterized in that it is used for the manufacture of a ball valve with a reduced aperture (5, 6).

5. Method according to one of the claims 1-3, characterized in that it is used for the manufacture of a ball valve with a full aperture so that the mantle of the tube (3, 4) has been expanded (32) and then narrowed for achieving the beveled front face (29) for jointing the sleeve-like cover (10).

6. Method according to one of the preceding claims, characterized in that the cover (10)

is attached to the mantle of the tube (3, 4) by laser welding (30, 31).

7. Method according to one of the claims 1-5, characterized in that the cover (10) is attached to the mantle of the tube (3, 4) by electron beam welding.

8. Method according to one of the preceding claims, characterized in that an aperture (20) is provided to the cover (10), to which aperture the spindle (13) rotating the valve ball (2) and the surrounding support sleeve (14) are fitted, the valve ball (2) and the surrounding support sleeve (14) are fitted, the support sleeve being jointed to the edge (21) of the aperture by beam welding.

9. Method according to Claim 8, characterized in that the cover (10) is shaped so that the edge (21) of the aperture (20) is located in one plane parallel to the axis of the tubes (3, 4).

10. Method according to Claim 9, characterized in that the mating faces (21, 26) of the edge (21) of the aperture (20) and the support sleeve (14) of the spindle, which are jointed together by beam welding, are in an angle of 30-60°, preferably approximately 45° in relation to the axial direction of the tubes (3, 4).

11. The use of beam welding, such as laser or electron beam welding in the assembly of a ball valve (1) when attaching the sleeve-like cover (10) surrounding the valve ball (2) and the ends (7, 8) of the tubes (3, 4) sealed against it from its ends (22, 23) to the flanks of the tubes.

12. The use of beam welding, such as laser or electron beam welding in the assembly of a ball valve when attaching the support sleeve (14) of the spindle rotating the valve ball (2) to the aperture (20) made to the sleeve-like cover (10) surrounding the valve ball and the ends (7, 8) of the tubes (3, 4) sealed against it.